

ABSTRACT OF THE DISCLOSURE

5 A positive electrode active material is a layered lithium
manganese compound represented by a general formula $\text{Li}_{1-x}\text{MO}_2$, where
x is a lithium-deficient quantity and larger than 1/5, and M is manganese
or metals of two or more kinds containing manganese as a main
component. The metals are preferably 3d-transition metals. The
positive electrode active material has a high capacity and is excellent in
structure stability. A rechargeable lithium-ion battery uses a positive
10 electrode material containing the positive electrode active material and
is excellent in cyclic stability.